***Ali Murad; February 19, 2022; Foundations of SQL; Assignment 06***

***https://github.com/Alimurad1/Foundations-Of-Databases-SQL-Programming/commits?author=Alimurad1***

Introduction:

In this write up, I will try to explain when to use a SQL View and the differences and similarities between a View, Function, and Stored Procedure.

1. Explain when you would use SQL View:

SQL View is used for more secured environment. It is used to permit other users to access data in a customized way so that same data can be seen by different users in different ways at the same time (https://www.youtube.com/watch?v=N\_rPXAj-74o&list=PLfycUyp06LG8cefs0gA38wO7nFrRjD5Ad&index=1) (external site).

1. Explain the differences and similarities between a View, Function, and Stored Procedure:

Differences: “A view returns a specific pre-defined statement as exactly one result set. A function returns a single value or a single result set”. (<https://www.google.com/search?q=difference+between+view+function+and+stored+procedure&source=hp&ei=otcRYuyBIYiIwbkP_ccR&iflsig=AHkkrS4AAAAAYhHlsiSRkOiGlOtxmconBJurQEFLHsCW&oq=differences+between+views+functions+and+stored&gs_lcp=Cgdnd3Mtd2l6EAEYADIGCAAQFhAeMggIABCGAxCLAzoRCC4QgAQQsQMQgwEQxwEQowI6DgguEIAEELEDEMcBEKMCOggIABCABBCxAzoFCC4QgAQ6CwguEIAEEMcBEKMCOggILhCxAxCDAToRCC4QgAQQsQMQgwEQxwEQrwE6BQgAEIAEOgsILhCABBCxAxDUAjoFCAAQsQM6DgguEIAEELEDEIMBENQCOgsILhCABBCxAxCDAToECAAQCjoHCAAQgAQQCjoICCEQFhAdEB46BQghEKABOgUIIRCrAlAAWNRkYLh7aANwAHgAgAF3iAHbHJIBBDQ1LjKYAQCgAQG4AQM&sclient=gws-wiz>) (external site).

“Views should be used to store commonly-used JOIN queries and specific columns to build virtual tables of an exact set of data we want to see. Stored procedures hold the more complex logic, such as INSERT, DELETE, and UPDATE statements to automate large SQL workflows”. (<https://www.google.com/search?q=difference+between+view+function+and+stored+procedure&source=hp&ei=otcRYuyBIYiIwbkP_ccR&iflsig=AHkkrS4AAAAAYhHlsiSRkOiGlOtxmconBJurQEFLHsCW&oq=differences+between+views+functions+and+stored&gs_lcp=Cgdnd3Mtd2l6EAEYADIGCAAQFhAeMggIABCGAxCLAzoRCC4QgAQQsQMQgwEQxwEQowI6DgguEIAEELEDEMcBEKMCOggIABCABBCxAzoFCC4QgAQ6CwguEIAEEMcBEKMCOggILhCxAxCDAToRCC4QgAQQsQMQgwEQxwEQrwE6BQgAEIAEOgsILhCABBCxAxDUAjoFCAAQsQM6DgguEIAEELEDEIMBENQCOgsILhCABBCxAxCDAToECAAQCjoHCAAQgAQQCjoICCEQFhAdEB46BQghEKABOgUIIRCrAlAAWNRkYLh7aANwAHgAgAF3iAHbHJIBBDQ1LjKYAQCgAQG4AQM&sclient=gws-wiz>) (external site)

“The function must return a value but in Stored Procedure it is optional. Even a procedure can return zero or n values. Functions can have only input parameters for it whereas Procedures can have input or output parameters. Functions can be called from Procedure whereas Procedures cannot be called from a Function”. (<https://www.google.com/search?q=difference+between+view+function+and+stored+procedure&source=hp&ei=otcRYuyBIYiIwbkP_ccR&iflsig=AHkkrS4AAAAAYhHlsiSRkOiGlOtxmconBJurQEFLHsCW&oq=differences+between+views+functions+and+stored&gs_lcp=Cgdnd3Mtd2l6EAEYADIGCAAQFhAeMggIABCGAxCLAzoRCC4QgAQQsQMQgwEQxwEQowI6DgguEIAEELEDEMcBEKMCOggIABCABBCxAzoFCC4QgAQ6CwguEIAEEMcBEKMCOggILhCxAxCDAToRCC4QgAQQsQMQgwEQxwEQrwE6BQgAEIAEOgsILhCABBCxAxDUAjoFCAAQsQM6DgguEIAEELEDEIMBENQCOgsILhCABBCxAxCDAToECAAQCjoHCAAQgAQQCjoICCEQFhAdEB46BQghEKABOgUIIRCrAlAAWNRkYLh7aANwAHgAgAF3iAHbHJIBBDQ1LjKYAQCgAQG4AQM&sclient=gws-wiz>) (external site)

Similarities: View or Functions, Stored Procedures are a Named Set of SQL statements. (Root R., Module 06 – Views, Functions, and Sored Procedures).

Summary:

In summary, Views and Functions are Named Select Statements whose code is stored in a database. Stored Procedures are similar, but they are not restricted to just Select Statements. (Root R., Module 06 – Views, Functions, and Stored Procedures).